

IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1. (Currently amended) A method comprising:
 calendar a plurality of virtual connections for processing, each virtual connection calendar to a particular time period such that the virtual connections are not calendar to at least one time period;
 storing a plurality of virtual connection addresses in a cache memory; ~~and~~
 processing a virtual connection corresponding to one of the plurality of virtual connection addresses during one of the at least one time periods;
 processing a calendar virtual connection; and
 adding the address of the processed calendar virtual connection to the cache memory upon a determination that the address of the processed calendar virtual connection is not currently in the cache memory, the processed calendar virtual connection has more data to transmit, and a recipient can receive more data.
2. (Original) The method of claim 1, wherein the most recently processed calendar virtual connection is stored in the cache memory.
3. (Original) The method of claim 1, wherein virtual connections corresponding to the virtual connection addresses stored in the cache memory are processed in a round-robin fashion.

4 - 5 (Canceled)

6. (Currently amended) The method of claim 4~~1~~, wherein the address of a processed calendared virtual connection meeting the evaluation criteria is stored in a first cache memory position.

7. (Currently amended) An apparatus comprising:

means for calendaring a plurality of virtual connections for processing, each virtual connection calendared to a particular time period such that the virtual connections are not calendared to at least one time period;

means for storing a plurality of virtual connection addresses in a cache memory; ~~and~~

means for processing a virtual connection corresponding to one of the plurality of virtual connection addresses during one of the at least one time periods;

means for processing a calendared virtual connection; and

means for adding the address of the processed calendared virtual connection to the cache memory upon a determination that the address of the processed calendared virtual connection is not currently in the cache memory, the processed calendared virtual connection has more data to transmit, and a recipient can receive more data.

8. (Original) The apparatus of claim 7, wherein the most recently processed calendared virtual connection is stored in the cache memory.

9. (Original) The apparatus of claim 7, wherein virtual connections corresponding to the virtual connection addresses stored in the cache memory are processed in a round-robin fashion.

10 - 11 (Canceled)

12. (Currently amended) The apparatus of claim ~~10~~, 7 wherein the address of a processed calendared virtual connection meeting the evaluation criteria is stored in a first cache memory position.

13. (Currently amended) A machine-readable medium that provides executable instructions, which when executed by a processor, cause said processor to perform a method comprising:

calendaring a plurality of virtual connections for processing, each virtual connection calendared to a particular time period such that the virtual connections are not calendared to at least one time period;

storing a plurality of virtual connection addresses in a cache memory; ~~and~~

processing a virtual connection corresponding to one of the plurality of virtual connection addresses during one of the at least one time periods;

processing a calendared virtual connection; and

adding the address of the processed calendared virtual connection to the cache memory upon a determination that the address of the processed calendared virtual connection is not currently in the cache memory, the processed calendared virtual connection has more data to transmit, and a recipient can receive more data.

14. (Original) The machine-readable medium of claim 13, wherein the most recently processed calendared virtual connection is stored in the cache memory.

15. (Original) The machine-readable medium of claim 13, wherein virtual connections corresponding to the virtual connection addresses stored in the cache memory are processed in a round-robin fashion.

16 – 17 (Canceled)

18. (Currently amended) The machine-readable medium of claim, 13 wherein the address of a processed calendared virtual connection meeting the evaluation criteria is stored in a first cache memory position.

19. (Currently amended) An apparatus comprising:

a virtual connection calendaring unit for calendaring a plurality of virtual connections for processing, each virtual connection calendared to a particular time period such that the virtual connections are not calendared to at least one time period;

a virtual connection address storage unit for storing a plurality of virtual connection addresses in a cache memory; and

a virtual connection processing unit to process a virtual connection corresponding to one of the plurality of virtual connection addresses during one of the at least one time periods; and

a calendared virtual connection processing unit to process a calendared virtual connection and add the address of the processed calendared virtual connection to the cache memory upon a determination that the address of the processed calendared virtual connection is not currently in

the cache memory, the processed calendared virtual connection has more data to transmit, and a recipient can receive more data.

20. (Original) The apparatus of claim 19, wherein the most recently processed calendared virtual connection is stored in the cache memory.

21. (Original) The apparatus of claim 12, wherein virtual connections corresponding to the virtual connection addresses stored in the cache memory are processed in a round-robin fashion.

22 – 23 (Canceled)

24. (Currently amended) The apparatus of claim ~~22~~, 19 wherein the address of a processed calendared virtual connection meeting the evaluation criteria is stored in a first cache memory position.